

microfiche appendix--.

Page 18, line 23: correct "dabel" to read --label--.
Page 28, line 17: between "used" and "a" insert --as--.
Page 32, line 10: correct "allow" to read --also--.
Page 33, line 17: correct "When s " to read --When a --
Page 34, line 31: correct "4242 " to read --424 -

In The Appendix:

Please replace the paper appendix as originally submitted, with the attached microfiche appendix in compliance with 37 CFR \$1.96(c).

In The Claims:

Please amend claims 1-3, 5-7, 9-10, and 16, and add claims 19-81, all as shown below in the full set of all pending claims presented for the Examiner's convenience.

1 1.(Twice Amended) A method for operating a computer system
2 including a memory configured according to a logical table, a
3 central processing unit and a display, said method including the
4 steps of:
5 configuring an extensible[said] logical table to include:
6 a plurality of rows, each said row including an object
7 identification number (OID) to identify each said row, each said
8 row corresponding to a record of information;
9 a plurality of columns intersecting said plurality of rows
10 to define a plurality of cells, a cell being basic unit of
11 storage, each said column including an OID to identify each said
12 column; and wherein
13 at least one row includes a fields cell having references to
14 a plurality of label[l]ed columns.

1 2. (Once Amended) The method of claim 1 wherein said
2 fields cell further includes information related to each of said
3 label[l]ed columns.

1 3. (Once Amended) The method of claim 1 further comprising
2 the step of performing an operation on data within said
3 label[l]ed columns according to said [template] at least one row.

1 4. The method of claim 3 wherein said operation comprises
2 at least one of the following: an editing operation, a printing
3 operation, a searching operation or an exporting operation.

1 5. (Once Amended) The method of claim 1 wherein said
2 [template] at least one row comprises a template for a structured
3 e-mail message.

1 6. (Once Amended) A method for storing and retrieving data
2 in a computer system including a memory, a central processing
3 unit and a display, said method including the steps of:
4 configuring said memory according to an extensible logical
5 table, said extensible logical table including:
6 a plurality of rows, each said row including an object
7 identification number (OID) to identify each said row, each said
8 row corresponding to a record of information;
9 a plurality of columns intersecting said plurality of rows
10 to define a plurality of cells, a cell being basic unit of
11 storage, each said column including an OID to identify each said
12 column, at least one cell in a particular row including a
13 definition, said definition including a reference to at least one
14 column;
15 automatically adding to said one cell a reference to a first
16 row according to said definition.

1 7. The method of claim 6 wherein said definition includes
2 a reference to every row that includes a valid value in a
3 [certain] first column.

1 8. The method of claim 6 wherein said definition includes
2 a query that results in references to a plurality of rows that
3 satisfy the query.

1 9. The method of claim [5]6 wherein said first[particular]
2 row comprises a folder type row.

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1 10. (Once Amended) A method for storing and retrieving data
2 in a computer system including a memory, a central processing
3 unit and a display, said method including the steps of:
4 configuring said memory according to an extensible logical
5 table, said extensible logical table including:
6 a plurality of rows, each said row including an object
7 identification number (OID) to identify each said row, each said
8 row corresponding to a record of information;
9 a plurality of columns intersecting said plurality of rows
10 to define a plurality of cells, a cell being basic unit of
11 storage, each said column including an OID to identify each said
12 column, at least one of said columns including information to
13 indicate an indexing method corresponding to said column; and
14 indexing said at least one column according to said indexing
15 method.

1 11. The method of claim 10 wherein:
2 at least one of said cells includes a pointer to an index
3 record; and
4 said indexing method includes the steps of:
5 searching said table for at least two key words; and
6 creating index records for at least two key words, said
7 index records including one or more pointers to cells in said
8 table that contain said key words.

1 12. The method of claim 11 further including the step of
2 querying said table, said step querying said table further
3 including the steps of:
4 locating one of said index records according to the query of

5 a user;
6 retrieving at least one cell in said table pointed to by
7 said located index record.

1 13. The method of claim 12 wherein said step of locating
2 one of said index records further includes the steps of locating
3 at least one of said index records pointed to by said at least
4 one retrieved cell.

1 14. The method of claim 13 further including the step of
2 weighting key words and retrieved cells according to pre-defined
3 search criteria.

1 15. The method of claim 13 further including the step of
2 filtering key words and retrieved cells according to pre-defined
3 search criteria.

A4 1 16. (Once Amended) A method for storing and retrieving data
2 in a computer system including a memory, a central processing
3 unit and a display, said method including the steps of:

4 configuring said memory according to an extensible logical
5 table, said extensible logical table including:

6 a plurality of rows, each said row including an object
7 identification number (OID) to identify each said row, each said
8 row corresponding to a record of information;

9 a plurality of columns intersecting said plurality of rows
10 to define a plurality of cells, a cell being the basic unit of
11 storage, each said column including an OID to identify each said
12 column, at least one cell in a particular row including an
13 annotation such that said annotation cell is fully integrated
14 into said logical table; and

15 performing an operation on said cell including said
16 annotation.

1 17. The method of claim 16 wherein said operation comprises
2 indexing.

18. The method of claim 16 wherein said annotation cell includes hypertext.

19. (Newly Presented) A method for storing and retrieving data in a computer system including a memory, a central processing unit and a display, said method including the steps of:

configuring said memory according to a logical table, said logical table including:

a plurality of rows, each said row including an object identification number (OID) to identify each said row, each said row corresponding to a record of information;

a plurality of columns intersecting said plurality of rows to define a plurality of cells, each said column including an OID to identify each said column, at least one of said columns including information to indicate an indexing method corresponding to said column, at least one of said cells includes a pointer to an index record;

indexing said at least one column according to said indexing method, said indexing method includes the steps of;

searching said table for at least two key words; creating index records for at least two key words, said index records including one or more pointers to cells in said table that contain said key words;

querying said table, said step querying said table further including the steps of:

locating one of said index records according to the query of a user;

retrieving at least one cell in said table pointed to by said located index record, said step of locating one of said index records further includes locating at least one of said index records pointed to by said at least one retrieved cell; and

weighting key words and retrieved cells according to pre-defined search criteria.

1 20. (Newly Presented) A method for storing and retrieving
2 data in a computer system including a memory, a central
3 processing unit and a display, said method including the steps
4 of:

5 configuring said memory according to a logical table, said
6 logical table including;

7 a plurality of rows, each said row including an object
8 identification number (OID) to identify each said row, each said
9 row corresponding to a record of information;

AS 10 a plurality of columns intersecting said plurality of rows
11 to define a plurality of cells, each said column including an OID
12 to identify each said column, at least one of said columns
13 including information to indicate an indexing method
14 corresponding to said column, at least one of said cells includes
15 a pointer to an index record;

16 indexing said at least one column according to
17 said indexing method, said indexing method includes the
18 steps of:

19 searching said table for at least two key words;
20 creating index records for at least two key words, said
21 index records including one or more pointers to cells in said
22 table that contain said key words;

23 querying said table, said step querying said table further
24 including the steps of:

25 locating one of said index records according to the query of
26 a user;

27 retrieving at least one cell in said table pointed to by
28 said located index record, said step of locating one of said
29 index records further includes locating at least one of said
30 index records pointed to by said at least one retrieved cell; and
31 filtering key words and retrieved cells according to pre-defined
32 search criteria.

1 21. (Newly Presented) A method for storing and retrieving
2 data in a computer system including a memory, a central

3 processing unit and a display, said method including the steps
4 of:

5 configuring said memory according to a logical table, said
6 logical table including;

7 a plurality of rows, each said row including an object
8 identification number (OID) to identify each said row, each said
9 row corresponding to a record of information;

10 a plurality of columns intersecting said plurality of rows
11 to define a plurality of cells, each said column including an OID
12 to identify each said column, at least one cell in a particular
13 row including an annotation such that said annotation cell is
14 fully integrated into said logical table; and

15 performing an operation on said cell including said
16 annotation wherein said annotation cell includes hypertext.

1 22. (Newly Presented) A method for storing and retrieving
2 data in a computer system memory comprising the steps of:

3 configuring said memory according to an extensible logical
4 table having a plurality of intersecting rows and columns
5 defining a plurality of cells, at least one of said cells
6 includes a pointer to an index record;

7 indexing at least one column by;

8 creating index records for said at least two key words,
9 said index records including one or more pointers to cells
10 in said extensible logical table that contain said at least
11 two key words;

12 locating one of said index records according to the
13 query of a user;

14 retrieving at least one cell in said extensible logical
15 table pointed to by said located index record;

16 locating at least one of said index records pointed to
17 by said at least one retrieved cell; and

18 weighting key words and retrieved cells according to
19 pre-defined search criteria.

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1 23. (Newly Presented) A method for storing and retrieving
2 data in a computer system memory comprising the steps of:
3 configuring said memory according to an extensible logical
4 table having a plurality of intersecting rows and columns
5 defining a plurality of cells;
6 creating index records for at least two key words, said
7 index records including one or more pointers to cells in said
8 extensible logical table that contain said key words, at least
9 one of said cells includes a pointer to an index record;
10 indexing at least one column according to an indexing
11 method;
12 locating one of said index records according to the
13 query of a user;
14 retrieving at least one cell in said table pointed to
15 by said located index record;
16 locating at least one of said index records pointed to
17 by said at least one retrieved cell; and
18 filtering key words and retrieved cells according to
19 pre-defined search criteria.

1 24. (Newly Presented) A method for storing and retrieving
2 data in a computer system memory comprising the steps of:
3 configuring said memory according to an extensible logical
4 table having a plurality of intersecting rows and columns
5 defining a plurality of cells, at least one of said columns
6 including information to indicate an indexing method
7 corresponding to said column, at least one cell includes an
8 annotation such that said annotation cell is fully integrated
9 into said extensible logical table; and
10 performing an operation on said cell including said
11 annotation wherein said annotation cell includes hypertext.

1 25. (Newly Presented) In a method for storing and
2 retrieving information in a computer memory by configuring said
3 memory according to a logical table having a plurality of rows,

4 each said row corresponding to a record of information, and a
5 plurality of columns intersecting said plurality of rows to
6 define a plurality of cells, the improvement comprising:
7 including references to a plurality of labeled columns in a
8 fields cell in at least one row.

1 26. (Newly Presented) The method of claim 25 wherein said
2 fields cell further comprises information related to each of said
3 columns.

1 27. (Newly Presented) The method of claim 25 further
2 comprising the step of performing an operation on data within
3 said columns according to said at least one row.

1 28. (Newly Presented) The method of claim 27 wherein said
2 operation comprises at least one of the following: an editing
3 operation, a printing operation, a searching operation or an
4 exporting operation.

1 29. (Newly Presented) The method of claim 25 wherein said
2 at least one row comprises a template for a structured e-mail
3 message.

1 30. (Newly Presented)) In a method for storing and
2 retrieving information in a computer memory by configuring said
3 memory according to a logical table having a plurality of rows,
4 each said row corresponding to a record of information, and a
5 plurality of columns intersecting said plurality of rows to
6 define a plurality of cells, the improvement comprising:

7 including a definition in at least one cell in a first row,
8 said definition including a reference to at least one column;
9 automatically adding to said one cell a reference to a
10 second row according to said definition.

1 31. (Newly Presented) The method of claim 30 wherein said
2 definition includes a reference to every row that includes a
3 valid value in a first column.

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1 32. (Newly Presented) The method of claim 30 wherein said
2 definition includes a query that results in references to a
3 plurality of rows that satisfy the query.

1 33. (Newly Presented) The method of claim 30 wherein said
2 first row comprises a folder type row.

1 34. (Newly Presented)) In a method for storing and
2 retrieving information in a computer memory by configuring said
3 memory according to a logical table having a plurality of rows,
4 each said row corresponding to a record of information, and a
5 plurality of columns intersecting said plurality of rows to
6 define a plurality of cells, the improvement comprising:

7 including information in at least one of said columns to
8 indicate an indexing method corresponding to said column; and
9 indexing said at least one column according to said indexing
10 method.

1 35. (Newly Presented) The method of claim 34 wherein:
2 at least one of said cells includes a pointer to an index
3 record; and

4 said indexing method includes the steps of:
5 searching said table for at least two key words; and
6 creating index records for at least two key words, said
7 index records including one or more pointers to cells in said
8 table that contain said key words.

1 36. (Newly Presented) The method of claim 35 further
2 including the step of querying said table, said step querying
3 said table further including the steps of:

4 locating one of said index records according to the query of
5 a user;

6 retrieving at least one cell in said table pointed to by
7 said located index record.

1 37. (Newly Presented) The method of claim 36 wherein said

2 step of locating one of said index records further includes the
3 steps of locating at least one of said index records pointed to
4 by said at least one retrieved cell.

1 38. (Newly Presented) The method of claim 37 further
2 including the step of weighting key words and retrieved cells
3 according to pre-defined search criteria.

1 39. (Newly Presented) The method of claim 37 further
2 including the step of filtering key words and retrieved cells
3 according to pre-defined search criteria.

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1 40. (Newly Presented)) In a method for storing and
2 retrieving information in a computer memory by configuring said
3 memory according to a logical table having a plurality of rows,
4 each said row corresponding to a record of information, and a
5 plurality of columns intersecting said plurality of rows to
6 define a plurality of cells, the improvement comprising:
7 including an annotation in at least one cell in a first row,
8 said annotation cell being fully integrated into said logical
9 table; and
10 performing an operation on said at least one cell including
11 said annotation.

1 41. (Newly Presented) The method of claim 40 wherein said
2 operation comprises indexing.

1 42. (Newly Presented) The method of claim 40 wherein said
2 annotation cell includes hypertext.

1 43. (Newly Presented) A device for storing and retrieving
2 data in a computer system memory comprising:
3 an extensible logical table having a plurality of
4 intersecting rows and columns defining a plurality of cells;
5 at least one row includes a fields cell having references to
6 a plurality of labeled columns
7 an index record for at least two key words, said index

8 record including one or more pointers to cells in said extensible
9 logical table that contain said at least two key words;
10 means for locating one of said index records according to
11 the query of a user;
12 means for retrieving at least one cell in said extensible
13 logical table pointed to by said located index record;
14 means for locating at least one of said index records
15 pointed to by said at least one retrieved cell; and
16 means for weighting key words and retrieved cells according
17 to pre-defined search criteria.

AS 1 44. (Newly Presented) A device for storing and retrieving
2 data in a computer system memory comprising:
3 an extensible logical table having a plurality of
4 intersecting rows and columns defining a plurality of cells;
5 at least one row includes a fields cell having references to
6 a plurality of labeled columns
7 an index record for at least two key words, said index
8 record including one or more pointers to cells in said extensible
9 logical table that contain said at least two key words;
10 means for locating one of said index records according to
11 the query of a user;
12 means for retrieving at least one cell in said extensible
13 logical table pointed to by said located index record;
14 means for locating at least one of said index records
15 pointed to by said at least one retrieved cell; and
16 means for filtering key words and retrieved cells according
17 to pre-defined search criteria.

1 45. (Newly Presented) A device for storing and retrieving
2 data in a computer system memory comprising:
3 an extensible logical table having a plurality of
4 intersecting rows and columns defining a plurality of cells;
5 at least one row includes a fields cell having references to
6 a plurality of labeled columns

7 at least one cell includes an annotation such that said
8 annotation cell is fully integrated into said extensible logical
9 table; and
10 performing an operation on said cell including said
11 annotation wherein said annotation cell includes hypertext.

1 46. (Newly Presented) A method for operating a computer
2 system memory comprising the steps of:
3 configuring an extensible logical table to include:
4 a plurality of rows, each row corresponding to a
5 record of information;
6 a plurality of columns intersecting said plurality
7 of rows to define a plurality of cells; and
8 at least one row includes a fields cell having references to
9 a plurality of columns.

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1 47. (Newly Presented) The method of claim 46 wherein said
2 fields cell further includes information related to each of said
3 referenced columns.

1 48. (Newly Presented) The method of claim 46 further
2 comprising the step of:
3 performing an operation on data within said referenced
4 columns according to said at least one row.

1 49. (Newly Presented) The method of claim 48 wherein said
2 operation comprises at least one of the following: an editing
3 operation, a printing operation, a searching operation or an
4 exporting operation.

1 50. (Newly Presented) The method of claim 46 wherein said
2 at least one row comprises a template for a structured e-mail
3 message.

1 51. (Newly Presented) A method for storing and retrieving
2 data in a computer system memory comprising the steps of:
3 configuring an extensible logical table in a computer system

4 memory to include:
5 a plurality of rows, each row corresponding to a
6 record of information;
7 a plurality of columns intersecting said plurality
8 of rows to define a plurality of cells;
9 at least one cell in a first row including a
10 definition, said definition including a reference to at
11 least one column; and
12 automatically adding to said at least one cell a reference
13 to a second row according to said definition.

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1 52. (Newly Presented) The method of claim 51 wherein said
2 definition includes a reference to every row that includes a
3 valid value in a first column.

1 53. (Newly Presented) The method of claim 51 wherein said
2 definition includes a query that results in references to a
3 plurality of rows that satisfy the query.

1 54. (Newly Presented) The method of claim 51 wherein said
2 first row comprises a folder type row.

1 55. (Newly Presented) A method for storing and retrieving
2 data in a computer system memory comprising the steps of:
3 configuring an extensible logical table in a computer system
4 memory to include:
5 a plurality of rows, each row corresponding to a
6 record of information;
7 a plurality of columns intersecting said plurality
8 of rows to define a plurality of cells; and
9 at least one of said columns including information
10 to indicate an indexing method corresponding to said
11 column; and
12 indexing said at least one column according to said indexing
13 method.

1 56. (Newly Presented) The method of claim 55 wherein:
2 at least one of said cells includes a pointer to an index
3 record; and
4 said indexing method comprises the steps of:
5 searching said extensible table for at least two key
6 words; and
7 creating index records for at least two key words, said
8 index records including one or more pointers to cells in
9 said extensible table that contain said key words.

1 57. (Newly Presented) The method of claim 56 further
2 comprising the steps of:
3 locating one of said index records according to the query of
4 a user;
5 retrieving at least one cell in said table pointed to by
6 said located index record.

1 58. (Newly Presented) The method of claim 57 wherein said
2 step of locating one of said index records further comprises the
3 step of locating at least one of said index records pointed to by
4 said at least one retrieved cell.

1 59. (Newly Presented) The method of claim 58 further
2 comprising the step of weighting key words and retrieved cells
3 according to pre-defined search criteria.

1 60. (Newly Presented) The method of claim 58 further
2 comprising the step of filtering key words and retrieved cells
3 according to pre-defined search criteria.

1 61. (Newly Presented) A method for storing and retrieving
2 data in a computer system memory comprising the steps of:
3 configuring an extensible logical table in a computer system
4 memory to include:
5 a plurality of rows, each row corresponding to a
6 record of information;

7 a plurality of columns intersecting said plurality
8 of rows to define a plurality of cells; and
9 at least one cell in a first row including an
10 annotation such that said annotation cell is fully
11 integrated into said extensible logical table; and
12 performing an operation on said cell including said
13 annotation.

1 62. (Newly Presented) The method of claim 61 wherein said
2 operation comprises indexing.

1 63. (Newly Presented) The method of claim 61 wherein said
2 annotation cell includes hypertext.

AS 1 64. (Newly Presented) A data storage and retrieval system
2 for a computer having a memory, a central processing unit and a
3 display, comprising:
4 means for configuring said memory according to an extensible
5 logical table, said extensible logical table including:
6 a plurality of cells, each said cell having a first
7 address segment and a second address segment;
8 a plurality of attribute sets, each said attribute set
9 including a series of cells having the same second address
10 segment, each said attribute set including an object
11 identification number (OID) to identify each said attribute
12 set; and
13 a plurality of records, each said record including a
14 series of cells having the same first address segment, each
15 said record including an OID to identify each said record,
16 wherein at least one of said records has an OID equal to the
17 OID of a corresponding one of said attribute sets, and at
18 least one of said records includes a fields cell having
19 references to a plurality of attribute sets.

1 65. (Newly Presented) The system of claim 64 wherein said
2 fields cell further comprises information related to each of said

3 referenced attribute sets.

1 66. (Newly Presented) The system of claim 64 further
2 comprising:

3 means for performing an operation on data within said
4 referenced attribute sets according to said at least one record.

1 67. (Newly Presented) The system of claim 66 wherein said
2 operation comprises at least one of the following: an editing
3 operation, a printing operation, a searching operation or an
4 exporting operation.

1 68. (Newly Presented) The system of claim 64 wherein said
2 at least one record comprises a template for a structured e-mail
3 message.

1 69. (Newly Presented) A data storage and retrieval system
2 for a computer having a memory, a central processing unit and a
3 display, comprising:

4 means for configuring said memory according to an extensible
5 logical table, said extensible logical table including:

6 a plurality of cells, each said cell having a first
7 address segment and a second address segment;

8 a plurality of attribute sets, each said attribute set
9 including a series of cells having the same second address
10 segment, each said attribute set including an object
11 identification number (OID) to identify each said attribute
12 set;

13 a plurality of records, each said record including a
14 series of cells having the same first address segment, each
15 said record including an OID to identify each said record,
16 wherein at least one of said records has an OID equal to the
17 OID of a corresponding one of said attribute sets;

18 at least one cell in a first record including a
19 definition, said definition including a reference to at
20 least one attribute set; and

21 means for automatically adding to said at least one cell a
22 reference to a second record according to said definition.

1 70. (Newly Presented) The system of claim 69 wherein said
2 definition comprises a reference to every record that includes a
3 valid value in a first attribute set.

1 71. (Newly Presented) The system of claim 69 wherein said
2 definition comprises a query that results in references to a
3 plurality of rows that satisfy the query.

1 72. (Newly Presented) The method of claim 69 wherein said
2 first record comprises a folder type record.

AS 1 73. (Newly Presented) A data storage and retrieval system
2 for a computer having a memory, a central processing unit and a
3 display, comprising:

4 means for configuring said memory according to an extensible
5 logical table, said extensible logical table including:

6 a plurality of cells, each said cell having a first
7 address segment and a second address segment;

8 a plurality of attribute sets, each said attribute set
9 including a series of cells having the same second address
10 segment, each said attribute set including an object
11 identification number (OID) to identify each said attribute
12 set, at least one of said attribute sets including
13 information to indicate an indexing method corresponding to
14 said attribute set;

15 a plurality of records, each said record including a
16 series of cells having the same first address segment, each
17 said record including an OID to identify each said record,
18 wherein at least one of said records has an OID equal to the
19 OID of a corresponding one of said attribute sets; and

20 means for indexing said at least one attribute set according
21 to said indexing method.

1 74. (Newly Presented) The system of claim 73 wherein:
2 at least one of said cells includes a pointer to an index
3 record; and
4 said means for indexing further comprises:
5 means for searching said extensible table for at least
6 two key words; and
7 means for creating index records for at least two key
8 words, said index records including one or more pointers to
9 cells in said extensible table that contain said key words.

1 75. (Newly Presented) The system of claim 74 further
2 comprising:
3 means for locating one of said index records according to
4 the query of a user;
5 means for retrieving at least one cell in said extensible
6 table pointed to by said located index record.

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1 76. (Newly Presented) The system of claim 75 wherein said
2 means for locating one of said index records further comprises
3 means for locating at least one of said index records pointed to
4 by said at least one retrieved cell.

1 77. (Newly Presented) The system of claim 76 further
2 comprising means for weighting key words and retrieved cells
3 according to pre-defined search criteria.

1 78. (Newly Presented) The system of claim 77 further
2 comprising the step of filtering key words and retrieved cells
3 according to pre-defined search criteria.

1 79. (Newly Presented) A data storage and retrieval system
2 for a computer having a memory, a central processing unit and a
3 display, comprising:
4 means for configuring said memory according to an extensible
5 logical table, said extensible logical table including:
6 a plurality of cells, each said cell having a first